

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/30/02

Date Received: 07/11/02

Project: Metro Self Monitor, PO# M68352

Date Extracted: 07/17/02

Date Analyzed: 07/17/02

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M68352 207076-01	0.19	0.14	0.11	0.07
Method Blank	<0.05	<0.05	<0.05	<0.05

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QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 207121-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.22	0.15	a	0-20
Copper	mg/L (ppm)	2.7	2.0	30 vo	0-20
Nickel	mg/L (ppm)	<0.05	<0.05	nm	0-20
Zinc	mg/L (ppm)	0.70	0.65	7	0-20

Laboratory Code: 207121-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	1	0.22	97	95	80-120	2
Copper	mg/L (ppm)	1	2.7	37 ai	31 ai	80-120	ai
Nickel	mg/L (ppm)	2	<0.05	104	102	80-120	2
Zinc	mg/L (ppm)	1	0.70	92	91	80-120	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	Acceptance Criteria
Chromium	mg/L (ppm)	1	103	80-120
Copper	mg/L (ppm)	1	102	80-120
Nickel	mg/L (ppm)	2	100	80-120
Zinc	mg/L (ppm)	1	105	80-120

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

vo - The value reported fell outside the control limits established for this analyte.

ai - The amount spiked was insufficient to give meaningful recovery data.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

July 30, 2002

DUPLICATE COPY

INVOICE #02ACU0730-1

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M68352 - Results of testing requested by
Gerry Thompson for material submitted on July 11, 2002.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc
by Method 6010B @ \$80 per sample

\$ 80.00

Amount Due

\$ 80.00

FEDERAL TAX ID #(b) (6)

207076

SAMPLE CHAIN OF CUSTODY

ME 7.11.02 AI

Send Report To

Gerald Thompson

Company

628 S. Hancock St

Address

Alaskan Copper works

City, State, ZIP

Seattle WA 98134

Phone #

206-382-8379

Fax #

206-382-9309

SAMPLERS (signature)

PROJECT NAME/NO.

PO #

REMARKS

Page # _____ of _____

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	ax	cy	n	z	
M68552	01	7/11/02	11:30	H2O	1											


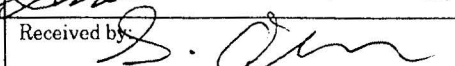
Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Gerald Thompson	ACW	7/11/02	11:30am
Received by: 	S. Olson	FHS, Inc	L	L
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

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July 30, 2002

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on July 11, 2002 from your Metro Self Monitor, PO# M68352 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
ACU0730R.DOC